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1951

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# Borough of Worthing



# ANNUAL REPORT

on the

## HEALTH OF WORTHING

and

Meteorological Observations

for the Year

1951



G. H. PRINGLE, M.R.C.S., L.R.C.P., D.P.H. Medical Officer of Health.



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Health Department,
Worthing Lodge,
Stoke Abbott Road.
Worthing.
August, 1952.

To The Worshipful the Mayor, Aldermen and Councillors of the Borough of Worthing.

Madam Mayor, Ladies and Gentlemen,

I present herewith my fifth Annual Report on the Health of Worthing, together with the Meteorological Observations for the year.

The general standard of health of the town was satisfactory during the year.

Of the common notifiable infectious diseases measles, which has a biennial incidence, reached epidemic proportions during the early part of the year, and whooping cough was also prevalent during the same period. On the other hand, there were only 33 cases of scarlet fever, and for the fourth successive year there were no cases of diphtheria. It is also satisfactory to note that there was only one case of poliomyelitis during the year and that this case made a complete recovery.

The high proportion of aged people in the Borough continues to place a heavy strain on the hospital, home nursing, domestic help and welfare services. Although administered by different authorities co-operation between these services, which is essential for their smooth and efficient working, is good.

I should like to express my appreciation of the deep interest taken in the Health Services of the Borough by the Chairman and members of the Health Committee and by other members of the Council.

I also wish to record my sincere thanks to Dr. Aitken, my Deputy, to Mr. White and the District Inspectors, and to every member of the clerical staff for all their assistance and co-operation.

I am.

Madam Mayor, Ladies and Gentlemen,

Your obedient servant,

G. H. PRINGLE, Medical Officer of Health.

#### **HEALTH COMMITTEE:**

(as at 31st December, 1951).

COUNCILLOR R. A. MITCHELL, (Chairman)

COUNCILLOR T. A. CLIFFORD, (Vice-Chairman)

ALDERMAN E. R. WILLOUGHBY, F.R.H.S.

COUNCILLORS MRS. M. F. CALE, C. W. W. COOPER,

MRS. M. M. GRAY, F. KENTON, E. E. KEYS, P. H. LUMLEY,

MRS. D. STAPLETON SKINNER, L. WHITEHOUSE.

## HEALTH DEPARTMENT STAFF:

(as at 31.12.51)

#### Medical Officer of Health

G. H. PRINGLE, M.R.C.S., L.R.C.P., D.P.H.

## Deputy Medical Officer of Health

J. C. AITKEN, M.B., CH.B., D.P.H.

Chief Sanitary Inspector: ... ... S. S. WHITE, M.S.I.A., A.M.I.S.E. Deputy Chief Sanitary Inspector : ... ... H. F. JOWETT, M.S.I.A. District Sanitary Inspectors: ... D. E. PARKER, M.S.I.A. A. H. MATTHEWS, M.S.I.A. M. BLAKE, A.R.S.I Clerical Staff: Chief Clerk: T. L. CANTON Clerks: ... ... ... ... ... MISS B. M. WHITE MISS P. M. MAY MRS. P. M. LOWE D. TAYLOR Meteorological Observers : ... T. L. CANTON D. E. PARKER Other Staff: Rodent Operators : F. J. MARIGOLD J. H. OGLESBY D. WEST Disinfector and General Assistant: ...

## GENERAL STATISTICS, 1951.

Area of Mu	micipal	Borough,	inclu	iding fo	oreshor	e		8512.74	42 acres
Population (	Census	1921)						7.	31,520
Population	Census	1931)							46,230
Population	Census	1951)							69,375
Registrar-Ge	neral's	Estimate	of R	esident	Popul	ation	(1951)		68,060
Number of	inhabite	ed houses	(192	1)					7,710
Number of	inhabite	ed houses	(1.4.	51)					22,753
Rateable Va	lue (1.4	1.51)						£1	,012,020
Sum represe	nted by	a penny	rate,	1950-51			:	£4,116	15s. 2d.

BIRTH RATE. 10.3 per 1,000 population. Birth-rate after correction by the factor received from the Registrar-General, 12.2 per 1,000. (Number of births, 699). England and Wales, 15.9 per 1,000.

DEATH RATES (all causes). 20.2 per 1,000 population. Deathrate after correction by the factor received from the Registrar-General, 11.1 per 1,000. (Number of deaths, 1,375).

England and Wales, 12.5 per 1,000.

Infant rate, 25 per 1,000 live births. (Number of deaths, 17).

England and Wales, 30 per 1,000 live births.

Maternal rate, nil.

England and Wales, 0.79 per 1,000 births.

Tuberculosis rate, 0.26 per 1,000 population. (Number of deaths, 18).

England and Wales, 0.31 per 1,000 population.

MEAN ANNUAL TEMPERATURE (1951) . . . . 51.2 degrees Fahr.

HOURS OF BRIGHT SUNSHINE (1951), 1,838.4 hours; daily average, 5.03 hours; Summer, 6.98 hours; Winter, 3.08 hours.

TOTAL RAINFALL (1951) .. .. .. .. 37.98 inches

## VITAL STATISTICS.

The Registrar-General's estimate of the mid-year population of Worthing was 68,060, and this estimate has been adopted for the purposes of the statistics contained in this Report.

## BIRTHS.

The number of registered births (live and still) was 699 namely:-

	Total	Male	Female
Live Births-Legitimate	 643	353	290
Illegitimate	 44	22	22
Still Births-Legitimate	 11	7	4
' Illegitimate	 1	1	-

The Registrar-General provides a factor for the purpose of rendering the birth-rate of the Borough comparable with that of a district the population of which is of standard age and sex distribution. Accordingly the birth-rate is now multiplied by this factor which represents the birth-rate for comparison with other districts. The birth-rate of Worthing for 1951 adjusted in this manner is raised from 10.3 to 12.2 per 1,000 of the population. The birth-rate for England and Wales is 15.9 per 1,000.

Birth-rate per 1,000	popul	ation	:-		
Live Births					10.1
Still Births					0.18
Birth-rate per 1,000 "Area Comparability				applying	
Live Births					12.0
Still Births					0.25
Birth-rate (Live and	Still)	per	1,000	popu-	
lation					10.3
Birth-rate (Live and lation after applyi					
Factor":—					12.2
Still Birth-rate per 1	I) 000,	ive &	& Still)	births	17.2

Illegitimate births numbered 45 or 6.4 per cent. of the total births.

#### STILL-BIRTHS.

The registration of still-births is made compulsory by the Births and Deaths Registration Act, 1926.

During 1951 there were 12 still-births registered to Worthing residents representing a still-birth rate of 17.2 per 1,000 births (live and still) registered. Of the 12 still-births 1 (8.4 per cent.) was registered as illegitimate.

#### DEATHS.

The number of deaths registered in the Borough during 1951 was 1,215. Of these 160 were deaths of non-residents and were transferred to the districts in which the persons ordinarily resided. There were, on the other hand, 320 deaths of Worthing residents registered outside the Borough. The total (corrected) number of deaths assigned to the Borough was 1,375 (males 574, females 801). This gives a recorded death-rate of 20.2 compared with 12.5 for England and Wales. This recorded death rate, however, which is a crude rate, cannot be used to compare the mortality with that of other districts as the populations of all areas are not similarly constituted as regards the proportions of their sex and age group components.

The Registrar-General supplies an "Area Comparability Factor" and the crude death rate multiplied by this figure can then be compared with the death rate of the country as a whole or with the mortality of any other local area. The corrected death-rate so obtained is 11.1 per 1,000 population.

### INFANT MORTALITY.

During 1951 the deaths of 17 infants under one year of age were registered. The total number of live births registered during the year was 687 giving an infantile mortality rate of 24.7 per 1,000 live births. The infantile mortality rate in England and Wales during 1951 was 29.6.

The Worthing rate is the lowest for two years and is well below the average for the past decade.

The mortality rate in Worthing among female infants has during the last five years been roughly four-fifths of that for male infants, the actual figures being females 11.5, males 14.4 per 1,000 births.

There were 11 deaths of infants during the first four weeks of life (or 64.7 per cent. of the total infant deaths) as compared with 16 deaths (or 72.8 per cent) in 1950.

The causes of the 17 infant deaths are shown in detail on page 17.

### MATERNAL MORTALITY.

There were no maternal deaths during the year.

## CANCER MORTALITY.

The number of deaths of Worthing residents from cancer was 248 (males 104, females 144) as compared with 237 in 1950, 213 in 1949, 183 in 1948, 200 in 1947 and 196 in 1946. The death rate from the disease per 1,000 of the population was 3.64. The deaths from cancer constitute 18.0 per cent. of the total Worthing deaths during the year.

The following gives the comparative average death-rates from cancer in Worthing for quinquennial periods since 1910, and for each year since 1945:—

1910-1914	 	1.32	1945	 	 3.48
1915-1919	 	2.01	1946	 	 3.02
1920-1924	 	1.94	1947	 	 3.00
1925-1929	 **	2.29	1948	 	 2.71
1930-1934	 	2.33	1949	 	 3.10
1935-1939	 	2.53	1950	 	 3.47
1940-1944	 	3.11	1951	 	 3.64

The following table shows the localisation of the disease in the case of the 248 deaths recorded.

L	ocalisa	ation		N	lo. of deaths	
				Male	Female	Total
Stomach				 13	20	33
Lungs				 26	9	35
Breast				 -	34	34
Uterus				 C-2	13	13
Other and	unspe	ecified	organs	 65	68	133
			Total	 104	144	248

The mortality from cancer during the last 20 years is shown as follows:

Yea	Dea	aths	Total	Death rate per 1,000 of the
1 ca	Males	Females	Total	population
1932	 38	63	101	2.17
1933	 42	62	104	2.14
1934	 60	73	133	2.58
1935	 53	72	125	2.32
1936	 54	99	153	2.75
1937	 51	87	138	2.35
1938	64	87	151	2.56
1939	 57	106	163	2.66
1940	 82	104	186	2.73
1941	 69	92	161	2.88
1942	 76	113	189	3.47
1943	 79	90	169	3.22
1944	 68	109	177	3.27
1945	80	124	204	3.48
1946	 76	120	196	3.02
1947	 84	116	200	3.00
1948	 80	103	183	2.71
1949	 95	118	213	3.10
1950	 87	150	237	3.47
1951	 104	144	248	3.64

This death rate is considerably higher than that for the country as a whole, and this is accounted for by the high proportion of aged persons resident in the Borough.

### INFLUENZA AND PNEUMONIA MORTALITY.

There were 69 deaths from these diseases as against 57 in 1950, 46 in 1949, 36 in 1948 and 42 in 1947. The mortality rate per 1,000 of the population was 1.02, as compared with 0.83 in 1950, 0.63 in 1949, 0.56 in 1948 and 0.63 in 1947. The rate for England and Wales in 1951 was 0.99 per 1,000 population.

## TUBERCULOSIS MORTALITY.

Deaths from tuberculosis numbered 18, of which 16, (i.e. 89 per cent.) were due to pulmonary tuberculosis.

The death-rate from tuberculosis was 0.26 per 1,000 population compared with 0.37 in 1950, 0.26 in 1949 and 0.34 in 1948.

The rate for England and Wales in 1951 was 0.31 per 1,000 population.

## DEATHS FROM HEART DISEASE.

Of the 1,375 deaths, heart disease caused roughly 1 in every 3 (males 218, females 303). It represented 38.0 per cent. of the total deaths from all causes and was equivalent to a death rate of 7.65 per 1,000 of the population.

## VITAL STATISTICS 1908—1951. TABLE I.

Registrar	General's Popu-	lation	26,600	27,200	27.800	30,500	31 300	27,500	22,100	33,000	32,000	27,766	27,662	28,780	30,345	31,555	31.520	31.460	31 440	32,260	32,200	35,050	36,350	38,030	41,410	42 340	44 320	46.470	48.530	51,580	53,930	55,540	58,600	59,080	61,210	06,330	54,500	50,500	54.080	58,620	64.860	66,750	67,520	67,940	68.350	68,060
	Cancer.	K.*	1.77	1.21	1.47	1 47	1 18	1,33	777	1.27	1.53	5.09	2.28	2.53	1.61	1.58	1.99	1.87	1 75	251	1 63	20.1	233	2.20	2.40	246	2.28	2.17	2.14	2.58	2.32	2.75	2.35	2.56	2.66	2000	2.47	3.33	3.77	3.48	3.02	3.00	2.71	3.10	34.7	3,64
	Ü	No.	47	33	41	45	37	30	200	745	46	280	63	73	49	20	63	59	55	300	09	38	84	× × ×	103	107	101	101	104	133	125	153	138	151	105	191	180	169	177	204	961	200	183	213	237	248
	uberculosis	K.*	1.39	1.65	1.55	1.21	100	0.84	10.0	1.03	07:	90.	1.48	1.32	1.15	0.92	1.02	1.11	0.83	000	0.85	0.85	0.76	0.68	0.80	0.87	1.04	0.84	89.0	99.0	0.67	0.45	0.72	0.52	45.0	0.70	0.40	0.63	0.40	0.54	0.34	0.38	0.34	0.26	0.37	0.26
	Tube	No.	37	45	43	37	37	20	170	24	20	40	4	38	35	59	32	35	90	33	200	30	280	26	34	37	46	39	33	34	36	25	475	3	97	30	33	33	23	32	22	26	23	18	25	18
	Zymotic.	×.×	19.0	0.44	0.28	1.64	910	0 37	200	40.0	0.44	0.18	0.32	0.45	0.13	0.19	0.20	80.0	0.14	0.07	0.07	0.14	0.19	0.31	010	0.07	0.11	0.20	0.12	90.0	0.07	0.05	0.03	0.07	0.00	0.00	0.00	0.00	0.0	0.03	0.17	0.04	1	0.03	0.04	0.04
	Zyn	No.	18	12	00	20	4	12	10	0	4 1	7	6	13	4	9	7	2	4		10		1	12	1 4		2	6	9	3	4	m	7	4.	4 4	0 64		, -	10	2	=	4	1	7	3	3
Deaths.	tality	Ratet	9.42	1	1.89	1	-	3 07	200	10.7	0.00	1	1	1	2.39	1	5.43	1.95	3.89	235	3.26	236	6.94	4.33	200	3.75	7.23	13.64	3.89	1.63	19.1	4.36	15	0.40	3.00	1.80	2.80	3 90	2.10	1.20	1	1	1	1.20	1.40	-
	Maternal Mortality	Other	4	1	1	I	1	-		- 0	0	1	1	1	1	1	2	1	-	-	-	-	. 2	-	-	2	2	m	1	-	1	0	1.	-	- 0	1-				-	1	1	1	-	1	1
	Mate	Sepsis.	-	1	-	1	1	-		1	1	1	1	1	-	1	-	-	-	1	1	1	1	_	. 1	1	2	4	2	1	_	1	1	1-	-		-	. 1	1	1	1	1	1	1	1	1/1
	nfants er 1 year.	R.**	109	75	99	105	41	67	609	85	10	00	4	76	99	36	59	52	45	49	48	40	46	37	24	36	37	39	38	20	40	35	55	67	707	36	35	32	4	39	48	32	24	50	31	25
	Infa		58	39	36	56	20	34	30	200	07	200	57	32	71	23	50	21	18	21	21	17	20	17	12	18	20	20	-81	12	25	23	33	97	33	32	35	24	40	31	20	31	50	91	22	11
	causes.	R.*	15.6	13.2	13.9	13.0	11.3	12.4	13.0	15.0	15.5	15.0	0.01	1/./	15.7	13.7	14.0	15.0	13.6	16.6	13.7	15.3	15.7	14.4	16.5	15.1	15.5	16.8	14.7	14.6	14.0	0.0	9.01	15.0	17.6	18.7	20.5	20.4	19.2	20.0	18.8	18.7	16.3	17.8	19.5	7.07
	All c	No.	414	360	388	397	355	400	428	202	410	011	0:4	211	478	434	4	472	428	537	452	536	571	548	684	640	069	781	715	756	744	0/8	010	1000	1165	1044	9111	1073	1037	1173	1223	1251	1103	1209	1336	13/5
	Births.	K.*	19.9	19.0	19.7	17.4	15.5	15.6	146	14.0	14.5	10.0	7.1.3	17.9	12.1	8.5	15.5	12.8	12.8	13.3	13.4	12.1	11.9	12.2	11.9	12.6	12.5	11.0	10.6	11.9	5.1.5	4.71	17.4	10.0	90	10.1	13.3	14.3	17.1	13.8	16.3	15.0	12.8	12.0	10.4	10.3
	Bir	No.	531	218	248	532	486	504	483	457	100	950	329	419	376	583	487	404	401	426	442	423	432	462	494	534	553	513	514	615	621	199	671	762	657	200	724	775	924	811	1059	1003	861	818	714	649
	Year.		1908	6	10	11	12	13	-14	14	15	2.5	11	21	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	33	30	30	30	40	41	42	43	44	45	46	47	48	46	200	-

## TABLE II.

## BIRTH RATES, CIVILIAN DEATH RATES, ANALYSIS OF MORTALITY, MATERNAL MORTALITY, AND CASE RATES FOR CERTAIN INFECTIOUS DISEASES IN THE YEAR 1951. (Provisional figures based on Quarterly Returns).

	England and Wales	County Boroughs and Great Towns, including London	148 Smaller Towns (Resident Populations 25,000 to 50,000 1931 Census)	London Administra- tive County	Worthing
Births:		Rates per 1,0	00 Population.		
Line	15.5	17.2	16.7	17.0	12.0
Call	0.36	17.3 0 45	16.7 0.38	17.8 0.37	12.0
Deaths:	0.30	0.45	0.38	0.37	0.25
A 11	12 5	12.4	10 5	12.1	11.1
	12.5	13.4	12.5	13 1	11.1
Typhoid and					
Para-Typhoid	0.00	0.00	0.00	0.00	0.00
Fevers	0.00	0.00	0.00	0.00	C.00
Smallpox					
Pneumonia	0 61	0 65	0.63	0.61	0.66
Tuberculosis	0.31	0.37	0 31	0.38	0.26
Whooping					
Cough	0.01	0.01	0.01	0 01	0.01
Diphtheria	0 00	0.00	0.00	0.00	0.00
Influenza	0.38	0 36	0.38	0.23	0.35
Acute					THE REAL PROPERTY.
Poliomyelitis &					-
Polioencephalitis	0.00	0 01	0.01	0.00	0.00
Notifications:					
(corrected):					144
Typhoid Fever	0.00	0.00	0.00	0.01	0.04
Paratyphoid		1000000			700700000
Fever	0.02	0.03	0.02	0.01	-
Meningococcal				10000	W. 117
Infection	0.03	0.04	0.03	0.03	_
Scarlet Fever	1.11	1.20	1.20	1 10	0.50
Whooping	177	1.110	1.110		-
Cough	3.87	3.62	4.00	3.11	3.66
Diphtheria	0.02	0.02	0.03	0.01	_
Erysipelas	0.14	0.15	0.12	0.15	0.12
Smallpox	0.00	0.00	0.00	-	0.11
Measles	14.07	13.93	14 82	14.64	13.53
**	0.99	1 04	0.96	0.72	0.29
Acute	0.99	1 01	0.90	0,74	0.49
Poliomyelitis					
(including Polio-					
encephalitis)	1	The same			NED 1
Paralytic	0 03	0.03	0.02	0.03	0.01
Paralytic	0 03	0.03	0.03	0.02	0.01
Non-Paralytic		0 02	0.03		
Food Poisoning	0 13	0.15	0.08	0 23	
		Dates per 1	000 Live Diethe		1.3
Deaths:		Kates per 1,	000 Live Births.		
		100			
All causes under	20.0	22.0	00.0	26.1	24.7
1 year of age	29.6	33.9	27.6	26 4	24.7
Diarrhoea and		9			1733
Enteritis under					The same
2 years of age	1.4	1.6	1.0	0.7	_
	D	non 1 000 Terri	Distantia (i - Ti	and Callly	
16.6	Rate	es per 1,000 Total	Births (i.e., Live	and Still).	
Maternal					
Mortality:	0.00		NI-4 A		0.00
N. 1101	0.79	<	Not Available	->	0.00
Notifications:					
Puerperal Fever					
and Pyrexia	10 66	13.77	8 08	14.90	24.32

TABLE III.

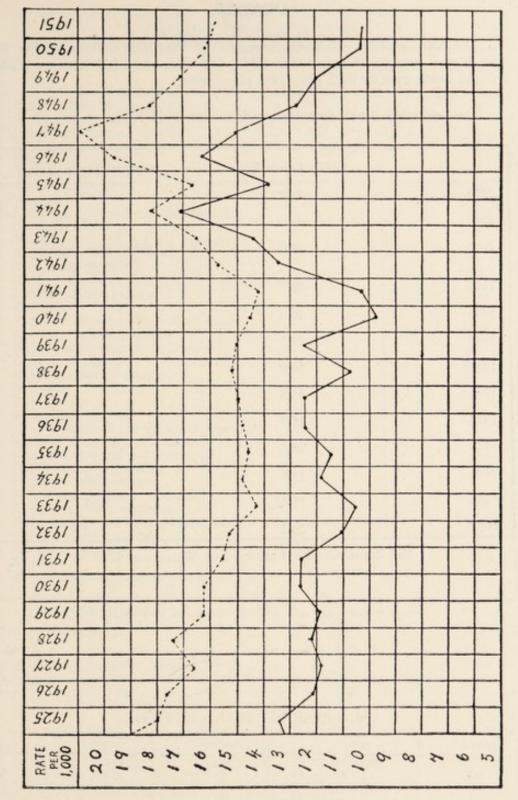
## BIRTHS.

The following table shows the number of births, and birth rate of Worthing, for the last 40 years.

	Total Births	Males	Females	Birth Rate	Adjusted Birth Rate
1912	486	246	240	15.5	_
1913	504	251	253	15.6	_
1914	483	233	250	14.6	_
1915	457	231	226	14.2	_
1916	468	225	243	15.5	_
1917	359	193	166	11.9	_
1918	419	219	200	12.9	_
1919	376	179	197	12.1	-
1920	583	281	302	18.5	-
1921	487	265	222	15.5	_
1922	404	221	183	12.8	
1923	401	214	187	12.8	_
1924	426	249	177	13.3	_
1925	442	223	219	13.4	_
1926	423	218	205	12.1	_
1927	432	223	209	11.9	_
1928	462	223	239	12.2	_
1929	494	242	252	11.9	1
1930	534	278	256	12.6	_
1931	553	299	254	12.5	_
1932	513	256	257	11.0	_
1933	514	255	259	10.6	_
1934	615	292	323	11.9	100 200
1935	621	296	325	11.5	-
1936	687	340	347	12.4	-
1937	729	378	351	12.4	be allering
1938	712	347	365	10.8	
1939	763	400	363	12.4	
1040	657	362	295	9.6	
1041	590	305	285	10.1	
1042	724	346	378	13.3	
1042	775	417	358	14.3	
1011	924	491	433	17.1	
1015	811	427	384	13.8	
1046	1059	1000		1000000	
1047	1003	536 527	523 476	16.3	-
1049		255		15.0	
1040	861	453	408	12.8	
1949	818	444	374	12.0	12.4
1950	714	350	364	10.4	12.4
1951	699	383	316	10.3	12.2

The birth rate for England and Wales for 1951 was 15.9 per 1,000.

CHART SHOWING WORTHING UNADJUSTED BIRTH RATE SINCE 1925.



(Dotted line represents Rate for England and Wales)

## DEATHS.

The total number of deaths assigned to Worthing after allowing for inward and outward transfers was 1,375, 574 males and 801 females, giving a crude death rate of 20.2 per 1,000 population.

The corrected death rate after adjustment is 11.1.

		Crude Death Rate	Adjusted Death Rate
1939	 	16.9	11.0
1940	 	17.6	11.1
1941	 	18.7	(no comparability factor issued).
1942	 	20.5	,,
1943	 	20.4	,
1944	 	19.2	,,
1945	 .:	20.0	,,
1946	 	18.8	,,
1947	 	18.7	"
1948	 	16.3	,,
1949	 	17.8	10.0
1950	 	19.5	10.9
1951		20.2	11.1

The death rate for England and Wales was 12.5.

TABLE IV CAUSES OF DEATH—1951.

All Causes	Males 574	Females 801
Tuberculosis, Respiratory	 7	9
Tuberculosis, other	 1	1
Syphilitic Disease	 2	2
Diphtheria	 -	-
Whooping Cough	 -	1
Meningococcal infections	 	_
Acute Poliomyelitis	 _	_
Measles	 1	1
Other infective and parasitic diseases	 1	1
Malignant neoplasm, stomach	 13	20
Malignant neoplasm, Lung, Bronchus	 26	9
Malignant neoplasm, Breast	 	34
Malignant neoplasm, Uterus	 _	13
Other malignant and lymphatic neoplasms	 65	68
Leukaemia aleukaemia	 2	2
Diabetes	 3	4
Vascular lesions of Nervous System	 60	136
Coronary disease, Angina	 92	85
Hypertension with heart disease	 - 11	18
Other heart disease	 115	200
Other circulatory disease	 12	27
Influenza	 9	15
Pneumonia	 16	29
Bronchitis	 28	19
Other diseases of respiratory system	 8	3
Ulcer of stomach and duodenum	 8	9
Gastritis, enteritis and diarrhoea	 2	4
Nephritis and nephrosis	 7	8
Hyperplasia of prostate	 15	_
Pregnancy, childbirth, abortion	 -	_
Congenital malformations	 4	1
Other defined and ill-defined diseases	 48	55
Motor vehicle accidents	 1	1
All other accidents	 9	21
Suicide	 - 6	4
Homicide and operations of war	 2	P P

The princi	ipal cau	ses of c	leath	during	the ye	ar wer	e:-	
Heart Diseases								 521
Cancer								 248
Intra-cranial v	ascular	lesions						 196
Bronchitis								 47

## DEATHS, AGE GROUPS-1951.

Age	Deaths	Age	Deaths
Under 1 year	17	35 to 44 years	17
1 to 2 years	4	45 to 54 "	
3 to 4	2	55 to 59	65 59 86
5 to 9	3	60 to 64 .,	86
10 to 14 ,,		65 to 69 ,,	138
15 to 19 ,,		70 to 79	509
20 to 24 ,,	2	80 to 89 ,,	392
25 to 34	9	90 years and over	72

This analysis shows that 70.8 per cent. of the deaths were of persons aged 70 years of age and upwards.

The number of deaths occurring in the four quarters of the year was as follows:—

		Deaths	Adjusted Death rate per 1,000 Population	Rate for England & Wales
First Quarter	 	474	15.3	19.1
Second Quarter	 	319	10.3	11.1
Third Quarter	 	258	8.3	9.1
Fourth Quarter	 	324	10.5	11.0
		1375	. 11.1	12.5

TABLE V.

BIRTH RATES, DEATH RATES,

AND INFANTILE MORTALITY RATES, 1931—1951.

Years	No. of births	Unadjusted Birth rate per 1,000 of the population	No. of deaths	Unadjusted Death rate per 1,000 of the population	Infantile Mortality rate per 1,000 birth
1931	553	12.5	690	15.5	37
1932	513	11.0	781	16.8	39
1933	514	10.6	715	14.7	38
1934	615	11.9	756	14.6	20
1935	621	11.5	744	14.0	40
1936	687	12.4	870	15.6	35
1937	729	12.4	916	15.6	45
1938	712	10.8	917	15.5	29
1939	763	12.4	1035	16.9	23
1940	657	9.6	1165	17.6	49
1941	590	10.1	1044	18.7	36
1942	724	13.3	1116	20.5	35
1943	775	14.3	1073	20.4	32
1944	924	17.1	1037	19.2	44
1945	811	13.8	1173	20.0	39
1946	1059	16.3	1223	18.8	48
1947	1003	15.0	1251	18.7	32
1948	861	12.8	1103	16.3	24
1949	818	12.0	1209	17.8	20
1950	714	10.4	1336	19.5	31
1951	699	10.3	1375	20.2	25

It will be noted from this table that the number of deaths has always exceeded the number of births during the last 21 years. There has been no "natural increase of the population" (i.e. excess of births over deaths) since the year 1921.

## TABLE VI.

## INFANTILE MORTALITY.

The number of deaths under one year of age was 17 (11 males and 6 females), giving an infant mortality rate of 25 per 1,000 live births. The corresponding rate for England and Wales for the year under review was 30.

	Year	No. of Infant Deaths	Proportion per 1,000 live births	Percentage of Total Deaths at all ages	Infant Mortality Rate in England and Wales
1927		 20	46	3.5	69
1928		 17	37	3.1	65
1929		 12	24	1.7	74
1930		 18	36	2.8	60
1931		 20	37	2.9	66
1932		 20	39	2.5	65
1933		 18	38	2.5	64
1934		 12	20	1.6	59
1935		 25	40	3.4	57
1936		 23	35	2.6	59
1937		 33	45	3.6	58
1938		 20	29	2.2	53
1939		 18	23	1.7	50
1940		 32	49	2.7	55
1941		 22	36	2.1	59
1942		 25	- 35	2.2	49
1943		 24	32	2.2	49
1944		 40	44	3.8	46
1945		 31	39	2.5	46
1946		50	48	4.2	43
1947	- 11	 31	32	2.4	41
1948		20	24	1.8	34
1949		 16	20	1.3	32
1950		22	31	1.6	30
1951		 17	25	1.3	30

The causes of deaths of children under one year for the last 5 years are as follows:—

Causa of			Deaths of infants under one year of age							
Cause of Infant Dea			1947	1948	1949	1950	1951			
Premature Births			 8	7	4	8	4			
Congenital Malfo	ormati	ons	 10	7	. 1	3	3			
Pneumonia			 4	5	1	3	4			
Atelectasis			 	_	2	2	1			
Asphyxia			 		3	_	2			
Spina Bifida			 	-		_				
Bronchitis			 _	_		1	_			
Gastro Enteritis			 1	_	2	1				
Tuberculosis			 	_	-	1				
All other causes			 8	1	3	3	3			
TOTALS			 31	20	16	22	17			

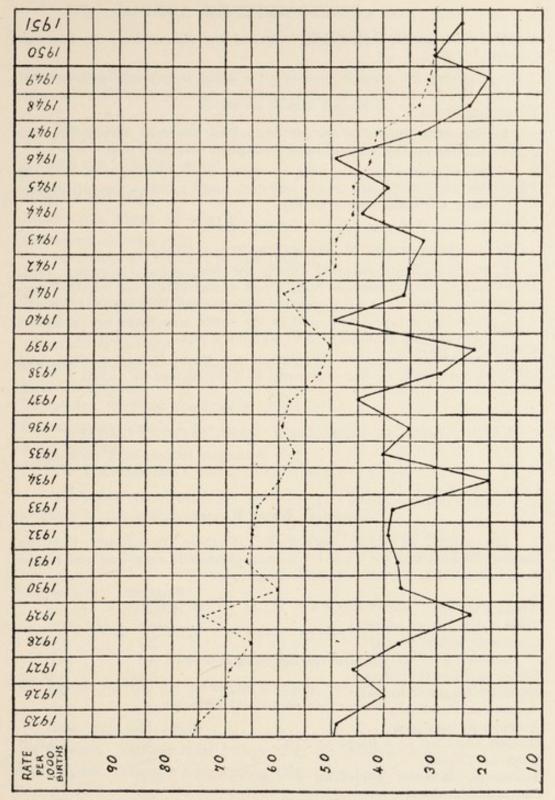
## TABLE VII.

## INFANTILE DEATHS 1951.

## TABLE SHOWING CAUSES AND AGES AT DEATH.

Cause	A	ge in	wee	ks	Total under 1	Age in months			s	Total		
	0-1	1-2	2-3	3-4	Month	1-2	2-3	3-6	6-9	9-12	Ages)	
Prematurity	 4	-	-	-	4	-	-	-	-	-	4	
Congenital Malformations	 2	1	_	_	3	_	_	_	_	_	3	
Pneumonia	 -	_	-	_	-	1	_	1	1	1	4	
Atelectasis	 -	_	_	_	-	_	_	_	_	1	1	
Asphyxia	 	_	_	_	_	_	1	1	_	_	2	
Other Causes	 3	-	-	-	3	_	-	-	-	-	3	

CHART SHOWING WORTHING INFANTILE MORTALITY RATE SINCE 1925.



(Dotted line represents Rate for England and Wales)

#### WATER SUPPLIES.

The water supply undertaking is owned and managed by the Borough Council.

The following information regarding the water supply has been supplied by Mr. H. A. Leader, Assoc.M.Inst.C.E., Assoc.M.Inst.W.E., Borough Water Engineer.

- 1. The water supply of the statutory area has been very satisfactory in both quality and quantity throughout the past year.
- Bacteriological examinations are made once a fortnight of both the raw and chlorinated water, whilst chemical examinations of the raw water are made once a month.
- 3. The water has no plumbo-solvent action.
- 4. No contamination of supplies has been reported.
- 5. The population supplied during the year ended December, 1951, was 73,500, all supplies being direct to the houses and no standpipes being used. The area supplied includes the Parishes of Clapham, Patching and Sompting, and in the entire area there are 61 houses (approximate population 200) without a piped water supply.

In addition water was supplied to the Rural District Council, and re-distributed by that Authority to a population of 11,590.

## THE CLINICAL RESEARCH ASSOCIATION LIMITED.

Watergate House, York Buildings, London, W.C.2.

Laboratory Report No. 14097.

17.8.51.

## Chemical Water Report.

The sample of water marked 36" Borehole, Broadwater Pumping Station, received here on 15.8.51, has been chemically examined and I have been instructed to forward the following report:—

		P	arts per	Grains per
ANALYSIS (B)			000,000	gallon
Total solids (dried at 180°C)			30.0	21.0
Combined chlorine (Cl)			2.7	1.9
equivalent to Sodium Chloride (NaCl)			4.5	3.1
Nitric nitrogen (Nitrates)			0.68	0.48
Nitrous nitrogen (Nitrites)			Nil	Nil
Ammoniacal nitrogen			Nil	Nil
Albuminoid nitrogen			Nil	Nil
Oxygen absorbed in 4 hours at 27°C.			Nil	Nil
Lead or Copper			Nil	Nil
Temporary hardness (equivalent to CaCo	$O_3$		20.0	14.0
Permanent hardness ( ", ",	)		4.0	2.8
Total hardness ( ", ",	)		24.0	16.8

The Hydrogen Ion Concentration is found to be pH 7.35.

The above results show this water to be of a high degree of organic purity and there is no evidence of pollution.

R. S. RALPH, M.R.C.S., D.P.H., Laboratory Director.

## THE CLINICAL RESEARCH ASSOCIATION LIMITED.

Watergate House, York Buildings, London, W.C.2.

Laboratory Report No. 15882.

9.11.51.

## Chemical Water Report.

The sample of water marked 48" Borehole Patching P.S. received here on 6.11.51, has been chemically examined, and I have been instructed to forward the following report:—

ANALYSIS (B)			oo,000	Grains per gallon
Total solids (dried at 180°C)			 34.0	23.8
Combined chlorine (Cl) equivalent to Sodium Chloride			 2.5 4.1	1.8 2.9
Nitric nitrogen (Nitrates)			 0.60	0.42
Nitrous nitrogen (Nitrites)			 Nil	Nil
Ammoniacal nitrogen			 Nil	Nil
Albuminoid nitrogen			 0.0004	0.0003
Oxygen absorbed in 4 hours at 2	27°C.		 0.005	0.004
Lead or Copper Temporary hardness (equivalent	to C		 Nil 22.0	Nil 15.4
Permanent hardness ( "	,,	)	 5.0	3.5
Total hardness ( "	,,,	)	 27.0	18.9

The Hydrogen Ion Concentration is found to be pH 7.15.

The above results show this water to be of good quality and there is no evidence of any pollution.

R. S. RALPH, M.R.C.S., D.P.H., Laboratory Director.

# PUBLIC HEALTH LABORATORY, ROYAL SUSSEX COUNTY HOSPITAL, BRIGHTON.

## Bacteriological Water Analysis.

On Sample marked 48" Borehole, Patching Pumping Station. (Sample has not been filtered or chlorinated).

Lab. Ref. No. 35074.

Received 17.7.51.

Plate Count. Yeastrel Agar 3 days 22°C. Aerobically-4 per ml.

Plate Count. Yeastrel Agar 2 days 37°C. Aerobically—less than 1 per ml.

Probable number of coliform bacilli, MacConkey 2 days, 37°C.—less than 1 per 100 ml.

Date of report, 20.7.51.

J. E. JAMESON,

Director.

# PUBLIC HEALTH LABORATORY, ROYAL SUSSEX COUNTY HOSPITAL, BRIGHTON

Bacteriological Water Analysis.

On sample from tap at private house, West Worthing.

Lab. Ref. No. 23028.

Received 27.2.51.

Plate Count. Yeastrel Agar 3 days 22°C. Aerobically—less than 1 per ml.

Plate Count. Yeastrel Agar 2 days 37°C. Aerobically—less than 1 per ml.

Probable number of coliform bacilli, MacConkey 2 days, 37°C.—less than 1 per 100 ml.

Date of report, 2.3.51.

J. E. JAMESON, Director.

## SWIMMING BATHS.

These were regularly inspected by the Medical Officer of Health and the Sanitary Inspectors. Frequent examinations of the water were carried out and the results showed that a satisfactory standard of purity was maintained.

## PREVALENCE OF, AND CONTROL OVER, INFECTIOUS AND OTHER DISEASES.

### Notifiable Infectious Diseases.

The following are the infectious diseases which are now notifiable to the Medical Officer of Health:—

Scarlet fever

Whooping cough

Diphtheria

Measles

Acute pneumonia (primary or influenzal)

Meningococcal infection

Acute poliomyelitis-

paralytic

non-paralytic

Acute encephalitis-

infective

post-infectious

Dysentery

Ophthalmia neonatorum

Puerperal pyrexia

Smallpox

Typhoid and Para-typhoid fevers

Food poisoning

Erysipelas

Malaria

Cholera

Plague

Typhus fever

Relapsing fever

Tuberculosis (all forms).

### NOTIFICATIONS.

The following table shows the infectious disease notifications received during the year together with any corrections that may have been made subsequently either by the patient's doctor or the Medical Superintendent of the Infectious Disease Hospital:—

		Scarlet Fever		oping ugh	Polion	c. nyelitis	Measles	
	M	F	M	F	M	F	M	F
Numbers originally notified	18	15	126	123	1		452	469
Final numbers after correction: Under 1 year 1-2 years 3-4 , 5-9 , 10-14 , 15-24 , 25 and over	2 6 6 6 - 3 1	- 4 8 1 1 1	4 23 55 43 — 1	7 36 33 35 4 2 6	=======================================	11111111	5 63 134 240 8 1	9 76 127 219 20 7 11
TOTAL	18	15	126	123	1		452	469
Cases removed to Hospital	13	11	_	3	1	_	5	9

	Ac. Pneumonia			hoid ver	Erysi	pelas	Dysenters	
	M	F	M	F	M	F	M	F
Numbers originally notified	 7	13	_	3	1	8	6	3
Final numbers after correction: Under 5 years 5-14 years 15-44 ,, 45-64 ,, 65 and over Age unknown	 2 1 - 1 3	- 4 - 1 8			_ _ _ _ _	_ _ _ 3 4 _	1 2 1 1 1	- 1 - - - 2
TOTAL	 7	13		3	1	7	6	3
Cases removed to Hospital	 2	1	_	3	1	2	1	_

Puerperal Pyrexia: Originally notified 17. Final number after correction 17. Ophthalmia Neonatorum: Originally notified 1. Final number after correction 1.

## ACUTE POLIOMYELITIS (Infantile Paralysis).

There was one confirmed case during the year compared with eleven in 1950 and seven in 1949. The patient, a child aged 5½ years, was a paralytic case and made a complete recovery.

## DIPHTHERIA

No cases were notified during the year. The incidence of this disease is shown below:—

Year	No. of cases	Deaths
1922	29	_
1923	16	1
1924	7	_
1925	9	1
1926	22	2
1927	83	4
1928	54	2
1929	20	1
1930	12	1 2 4 2 1 3 2 4 1
1931	31	2
1932	36	4
1933	33	1
1934	31	
1935	16	_
1936	20	_
1937	18	_
1938	23	1
1939	24	1
1940	3 5	_
1941	5	1
1942	_	_
1943	7 3	1
1944	3	2
1945	_	-
1946	3	1
1947	3	_
1948	_	
1949	_	_
1950	_	_
1951		-

These figures reveal the success of the Diphtheria Immunisation scheme, which was commenced in Worthing in the autumn of 1939.

## DIPHTHERIA IMMUNISATION AND VACCINATION AGAINST SMALL-POX.

### 1. Vaccination.

Vaccinations are carried out by Practitioners as a part of the General Medical Service, and a fee is payable by the County Council for the Record of the vaccination which the Practitioner supplies in each case.

The following table gives details of the vaccinations carried out during the year:—

## Number of Persons Vaccinated (or re-vaccinated).

Age at date of vaccination	Under 1	1	2 to 4	5 to 14	15 or over	Total
Number vaccinated	293	98	174	897	1302	2764
Number re-vaccinated	-	_	51	649	3406	4106

## Number of cases specially reported (age groups as above)

(a) Generalised Vaccinia	-	-	_	_		_
(b) Post-vaccinal Encephalomyelitis	-	-	1	-	_	1
(c) Death from complica- tions of vaccination other than (a) and (b)	-	_	_	-	_	_

The large number of vaccinations and re-vaccinations in the older age-groups were carried out at the beginning of the year during the Brighton small-pox outbreak. The modern method of controlling small-pox is by isolating and supervising the close contacts of cases rather than by vaccinating large numbers of persons who have never been case contacts. Only if this method breaks down and cases of unknown origin appear is a policy of mass vaccination on what is known as the "expanding ring principle" adopted. This position did not arise anywhere during the Brighton outbreak. However, as a result of the public clamour that occurred, the general immunity has been raised at least for a time and in addition the dangerously low state of vaccination in the infant population has been improved and emphasis has been given to the remarks I made on this subject in my Annual Report for 1949.

## Diphtheria Immunisation.

During the year 457 children received complete treatment as compared with 467 in the previous year. 255 children were immunised at the Clinics and 202 by medical practitioners, who submitted a record of the immunisation for which the County Council paid a fee.

### TABLE A.

The following Table gives details of the treatment undertaken during the year:—

	children who of primary in		Number of children receiving a reinforcing injection			
Age at date Injec	of Final	Total				
Under 5	5-14		398			
439. 18		457				

TABLE B.

Immunisation in Relation to Child Population.

Age at 31.12.51 i.e. born in year	Under 1 1951	1 1950	2 1949	3 1948	4 1947	5 to 9 1942-46	10 to 14 1937-41	Total under 15	Percent- age Im- munised
Number immunised	35	340	458	523	648	2421	2159	6584	
Estimated mid-year, population 1951	C	hildre	n und	er five		Childre 73	58.0		

Diphtheria immunisaton is carried out at the following clinics:-

Central Clinic . . . Tuesday at 2.30 p.m.

Durrington Clinic .. Monday at 2.30 p.m. at monthly

intervals.

Goring Clinic . . . As required.

Findon Valley Clinic .. As required.

### SCARLET FEVER.

The number of confirmed cases was 33, of which 24 were treated in hospital. There were no deaths, and in all cases admitted to hospital modern treatment modified the severity of the disease, shortened its duration, and completely eliminated any complications.

#### MEASLES.

Measles tends to reach epidemic proportions every two years, and in the spring of 1951 there were 921 cases notified. Fourteen cases, most of which were complicated by broncho-pneumonia, were admitted to hospital and all made a good recovery. One case treated at home died, bronchopneumonia being the cause of death.

## ADMISSION OF CASES TO INFECTIOUS DISEASE HOSPITALS.

The following Worthing cases were admitted during the year: -

## Swandean Infectious Disease Hospital.

Scarlet fever				24
Streptococcal sore thr	oat			3
Measles				10
Measles and broncho-j	oneumoi	nia		4
Chicken pox				2
Mumps				2
Whooping cough				1
Whooping cough and I	broncho	-pneumoi	nia	2
Erysipelas				2
Acute poliomyelitis				1
Typhoid fever				3
Typhoid fever carrier				2
Broncho-pneumonia				1
Dysentery				1
Observation cases				7
				-

65

## TUBERCULOSIS.

72 new cases were added to the Register during 1951:-

Pulmonary-	-Males	 31	Non-pulmonary—Males	4
	Females	 32	Females	5
				-
		63		9

49 cases were removed from the Register during the year, and 1 old case was restored.

## Tuberculosis Cases on the Register at 31st December, 1951:-

	Males	Females	Total
Pulmonary Non-pulmonary	 210 44	209 62	419 106
Totals	 254	271	525

## Table showing new cases in 1951 and mortality.

			1	New cases	s	Deaths				
Age periods		Puln	nonary	Non-pu	ılmonary	Pulm	onary	Non-pulmonary		
		M	F	M	F	M	F	M	F	
Under 1 year		_	-	1	_	_	_	_	-	
1-4 years		-	1	-	-	-	-	_	-	
5—14 ,,		4	-	-	3-	-	_	-	1	
15-24 ,,		4	14	-	_		-			
25-34 ,,		8	7	1	-	1	1	-	-	
35-44 ,,		4	5	_	-	_	2	-	_	
45-54 ,,		4	2	2	_	2	2	1	_	
55-64 ,,		4	1		_	2	1	_	_	
65 years and over		3	2	-	2	2	3	-	-	
TOTALS		31	32	4	5	7	9	1	1	

CHART SHOWING WORTHING TUBERCULOSIS DEATH RATE SINCE 1935.

RATE PER 1.000 1.0			_				_									_	_	
2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	RATE PER 1,000	1935	1936	1937	1938	1939	1940	1461	1942	1943	14461	1945	1946	1947	8461	1949	1950	1951
1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	2.0																	
1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.9																	
1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.8																	
1.5 1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.7																	
1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.6																	
1.3 1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.5																	
1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.4																	
1.2 1.1 1.0 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.3																	
1·0 0·9 0·8 0·7 0·6 0·5 0·4 0·3 0·2 0·1	1.2																	
0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1	1.1																	
0.8       0.7       0.6       0.5       0.4       0.3       0.2       0.1	1.0																	
0.7 0.6 0.5 0.4 0.3 0.2 0.1	0.9																	
0.6 0.5 0.4 0.3 0.2 0.1	0.8																	
0.6 0.5 0.4 0.3 0.2 0.1	0.7			٨														
0·4 0·3 0·2 0·1	0.6	1	*	/\				1		· .								
0.4 0.3 0.2 0.1	0.5		1		1			-				1						
0.3	0.4		٧		1	1			V		V					4.		
0.1	0.3					V							-		1			٠.
	0.2															V		1
0.0	0.1																	
	0.0																	
					-													

(Dotted line represents Rate for England and Wales).

The following table shows the mortality from tuberculosis (all forms) since 1935:—

	- ·	Death Rate per	1,000 of the population
Year	Deaths	Worthing	England and Wales
1935	36	0.67	0.72
1936	25	0.45	0.69
1937	42	0.72	0.70
1938	31	0.52	0.64
1939	26	0.34	0.64
1940	48	0.70	0.70
1941	39	0.70	0.73
1942	23	0.42	0.66
1943	33	0.63	0.67
1944	23	0.42	0.63
1945	32	0.54	0.62
1946	22	0.34	0.55
1947	26	0.38	0.55
1948	23	0.34	0.51
1949	18	0.26	0.45
1950	25	0.37	0.36
1951	18	0.26	0.31

It has not been necessary to take action under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 172 of the Public Health Act, 1936.

## FOOD POISONING.

No cases of food poisoning were notified during the year.

## CLEAN FOOD CAMPAIGNS.

Lectures and discussions have been given by the Medical Officer and the Chief Sanitary Inspector to a number of local organisations. Food traders' organisations have been approached and lectures given to food handlers.

## FOOD HYGIENE - BYELAW.

A Byelaw was made under Section 15 of the Food and Drugs Act, 1938, for the purpose of forbidding the sale of unsound meat in the same room as food for human consumption is handled. This Byelaw became operative on February 23rd, 1952.

## THE NATIONAL ASSISTANCE ACT, 1948.

## Section 47. Removal to suitable premises of persons in need of care and attention.

No legal proceedings were necessary during the year. In the few cases where difficulties occurred, informal action was sufficient to cope with the situation.

## Section 50. Burial of the Dead.

Under this Section of the Act it was necessary to arrange for the burial of eight persons where no suitable arrangements were being made.

## CLEANSING OF PERSONS.

Total attendances at Clinic			9
No. of heads cleansed			_
No. of individual cases of	Scabies	treated	
during the year			3

### STAFF MEDICAL EXAMINATIONS.

Medical examinations are undertaken by the Department in connection with new appointments. During the year 62 such examinations were carried out, details of which are as follows:—

Department	Males	Females
Town Clerk's	 _	4
Borough Engineer's	 10	_
Medical Officer's	 5	4
Borough Treasurer's	 1	5
Education	 4	17
Entertainments and Publicity	 1	2
Borough Librarian's	 2	7
	-	-
Total	 23	39
	anning the same of	Telephone .

Occasionally similar examinations are carried out at the request of other Local Authorities and during 1951 eight such examinations were undertaken.

## SANITARY INSPECTION OF THE AREA.

This is under the supervision of the Chief Sanitary Inspector, who has supplied me with the following report:—

## GENERAL INSPECTIONS.

General inspections included the following: -

Houses		 	 	 337
Factories		 	 	 464
Bakehouses		 	 	 78
Restaurant Ki	itchens	 	 	 253
Workplaces		 	 	 64
Dairies		 	 	 70
Ice Cream Pr	emises	 	 	 330
Food Shops		 	 	 1,887
Schools		 	 	 42
Drainage		 	 	 675
Shop's Act		 	 	 117
Revisits and	miscellaneous	 	 	 3,980

688 Public health nuisances or contraventions were recorded and 500 were remedied before the end of the year.

# SANITARY DEFECTS AND NUISANCES RECORDED INCLUDED THE FOLLOWING:—

#### Houses:

Houses:				
Roofs defective			 	23
Rainwater conductors defecti		 	35	
Chimney stacks and external	 	14		
Verminous			 	17
Re-decorations requested			 	12
Wall plaster defective		*	 	20
Wall dampness			 	33
Cooking ranges, fireplaces de	 	5		
Window frames or cords def		 	29	
Floors, staircases defective			 	17
Drainage:				
Requiring reconstruction			 	7
Defective condition			 	21
Choked			 	59
W.C.'s defective			 	24
				15
Insanitary yards		**	 	3
Offensive accumulations			 	15
Vacant land insanitary		**	 	3
Animals improperly kept			 	
Dilapidated refuse bins			 	442
Smoke nuisances	1.1		 	5

### COMPLAINTS.

They are classified as	follow	s:-	 	
General housing defe			 	 98
Dampness			 	 73
Overcrowding			 	 23
Vermin, insects			 	 64
Drainage defects			 	 93
Insanitary land, yards			 	 49

1,014 complaints were investigated and appropriate action was taken.

Animals improperly kept ... 18 .. Offensive smells 48 200 Smoke nuisances 16 Refuse bins defective ... 10 Rats 396 . . . . Mice 82 Miscellaneous 44

In numerous cases it was found that the grounds for complaint were trivial or that the nature of the complaint did not constitute a nuisance within the meaning of the Public Health Act, e.g. untidy vacant plots of land, etc.

### HOUSING.

Shortage of new houses continues to be very acute, and repairs to existing houses increasingly difficult on account of high costs and low rents.

As in previous years, it was not practicable to operate in general the provisions of the Housing Act in relation to repair, closure or demolition of unfit houses. A lower standard had to be accepted. Unfortunately, numerous sub-standard dwellings continue to deteriorate year by year.

### PUBLIC HEALTH ACT, 1936.

Section 269. Caravans.

Eleven licences and three licence renewals to permit the occupation of caravans as temporary dwellings were issued. Two applications were refused.

There is no licensed camping site within the Borough.

### RODENT CONTROL.

No. of complaints received		 478
No. of visits by Rodent Operators .		 3,133
No. of premises cleared		 282
Estimated No. of rats destroyed (excludi	ng gassing)	 2,656

No infestation of premises was recorded at 143 premises, the subject of complaint.

Nine major infestations were found and cleared.

No charge is made for the service of a rodent operator at private houses.

The keeping of poultry in back gardens has greatly increased the rat menace.

SEWER RATS.—Two treatments of the sewers were carried out. 165 chambers were found to be rat infested during the Spring treatment and 122 during the Autumn treatment.

Nine of the sixteen areas into which the Borough is divided are now free from rats. Fifteen were infested when this work was first commenced in 1944.

### FACTORIES ACTS, 1937 and 1948.

 INSPECTIONS for purposes of provisions as to health (including inspections made by Sanitary Inspectors).

	Premises	Number on Register	Number of Inspections	Written Notices
(i)	Factories in which Sections 1, 2, 3, 4, and 6 are to be enforced by Local Authorities	48	69	3
(ii)	Factories not included in (i) in which Section 7 is enforced by the Local Authority	267	301	22
(iii)	Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	6	12	2
	Total	321	582	27

2. Cases in which DEFECTS were found.

				Number of cases in which defects were found				
Particulars					Referred			
			Found Remedie		To H.M. Inspector	By H.M. Inspector		
Want of cleanliness (S.1.)			5	4	_	1		
Overcrowding (S.2)			2	2	-	-		
Unreasonable temperature (S.3)				_	_	-		
Inadequate ventilation (S.4)			-	-	-	_		
Ineffective drainage of floors (S.6) Sanitary Conveniences (S.7)				-	-	1		
(a) insufficient			4	4	-	1		
(b) unsuitable or defective			36	34		4		
(c) not separate for sexes				-	-	-		
Other offences against the Act (not offences relating to Outwork)	incl	uding	5	5	_	4		
TOTAL			52	49	_	9		

FIRE ESCAPE. One Certificate of Adequate Means of Escape in Case of Fire was granted.

### RAG FLOCK AND OTHER FILLING MATERIALS ACT, 1951.

Six premises were registered, and one licensed, pursuant to the requirements of the above Act.

Six samples of rag flock or other fillings were taken and analysed pursuant to the Act and Regulations.

One sample of half-down contained excessive impurities and appropriate action was taken.

### OFFENSIVE TRADES.

The only offensive trades in the Borough relate to two firms registered to deal in rags, bones and skins.

### NOTIFIABLE DISEASES.

900 visits were made in connection with enquiries relating to infectious disease or suspected infectious disease.

### DISINFECTION AND DISINFESTATION.

539 articles fumigated by steam	disinfe	ction	included	the follo	owing: -
Blankets and Rugs					80
Sheets, Eiderdowns, etc.					39
Mattresses and Feather Beds					153
Pillows, bolsters, cushions					194
Miscellaneous articles				-00	73
Number of rooms disinfected					68
Number of rooms disinfested					172
Revenue received: -					
for disinfection				£26	8s. 10d.
for disinfestation				£81	11s. 2d.

# NOTICES SERVED TO REMEDY DEFECTS OR ABATE NUISANCES OR CONTRAVENTIONS.

Act		Informal	Statutory
Public Health Act, 1936.			
Section 92 (defects and nuisances)		 73	3
" 39 (drainage and appliances)		 68	1
" 44-45-46 (water closets)		 11	
" 101 (smoke)		 5	
(miscellaneous)		 4	
Worthing Corporation Act (refuse bins)	1.0	 42	9
Worthing Corporation Act (watercourses)		 5	
Housing Acts		 85	5
Food and Drugs Act, 1938-1950			
Section 13 (food preparing)		 39	
Food Hygiene Byelaws		 14	
Milk and Dairies Regulations		 7	
Prevention of Damage by Pests Act 1949		 13	
Factories Act, 1937-1950		 23	
Shops Act, 1950. Sec. 38		 2	

Sewers maintainable by the Corporation at the owner's expense serving 114 houses found to be choked or defective were cleansed or repaired by the Corporation and the cost incurred recovered in accordance with requirements of the Public Health Act, 1936.

One drainage certificate was issued after examining and testing the drainage system and sanitary fittings on payment of the prescribed fee.

Forty-two houses were redrained to a main sewer and cesspools abolished.

One pail convenience was converted to the water carriage system.

### MEAT AND FOOD EXAMINATION.

Slaughtering is carried on at one Regional Slaughterhouse.

9 persons were licensed to slaughter animals under the Slaughter of Animals Act, 1933.

All animals were slaughtered with the aid of mechanically operated humane instruments.

The carcase of every animal slaughtered was examined; this entailed a vast amount of late night and Sunday work. 546 attendances were made at the slaughterhouse.

15,333 animals, i.e. 4,829 beasts, 2,233 calves, 6,712 sheep and 1,559 pigs were slaughtered and examined.

Approximately 27 tons of meat were found to be diseased and unfit for food. This was salvaged for animal feeding, fat rendering or fertilizers.

Meat found to be diseased included: -

#### Entire Carcases:

Beasts			 		٧.	29
Calves			 			9
Sheep			 			11
Pigs			 			13
Offals:			Beasts	Calves	Sheep	Pigs
Heads a	and Tong	gues	 283	3	-	22
Livers			 1,014	6	441	39

# Carcases Inspected and Condemned.

	Cattle excl. Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed Number inspected	 3,848 3,848	981 981	2,233 2,233	6,712 6,712	1,559 1,559
All diseases except Tuberculosis Whole carcases condemned	 2	3	9	11	.9.
Carcases of which some part or organ was condemned	 942	390	7	507	61
Percentage of the number inspected affected with disease other than tuberculosis	 24.5	40.0	0.7	7.7	4.5
Tuberculosis only. Whole carcases condemned	 9	15	-	_	4
Carcases of which some part or organ was condemned	 311	228	5	_	33
Percentage of the number inspected affected with tuberculosis	 8.3	24.8	0.2		2.4

Requests from local food tradesmen to examine foodstuffs of a doubtful character are received almost daily.

The undermentioned were found to be diseased or unsound and were condemned as being unfit for human food.

Tinned and other foods	s—195	51.	No	o, of tins, e	tc. lbs.
Milk			 	645	
Vegetables			 	466	
Jam			 	185	
Fruit			 	827	
Soup			 	98	
Tomatoes			 	52	
Tinned Fish			 	210	
Fish Cakes			 	65	
Tinned Ham			 	323	- 3,853
Tinned Meat			 	277	
Condiments			 	18	
Pickles			 	4	
Cereals			 	240	167
Cake			 		307
Mincemeat			 	2	
Wet Fish			 		1,428
Ice Cream			 	120	
Chocolate Spread			 	4	
Dried Fruit			 		31
Sweets			 		82
Dates			 	1	
Eggs			 	382	
Christmas Puddings			 	34	
Coffee			 	6	
Tea			 		2
Sugar			 		33
Beverages			 	20	

### Poultry, Game, etc.:

		N	o. of tins, etc.	lbs.
Poultry	 	 	21	173
Rabbits	 	 	52	
Sausages	 	 		45
Cooked Meats	 	 		10
Corned Beef	 	 		38
Fats:				
Cheese	 	 	37	135
Bacon	 	 	1000	21
Butter	 	 		62
Home Killed Meat:				
Beef	 	 		241
Mutton	 	 		7
Pork	 	 		72
. Veal	 	 		9
Offals	 	 		59

85 premises are registered for the manufacture of sausages or potted, pressed, pickled or preserved food for sale.

### MILK.

278 samples were taken and the following is a synopsis of the results Examination for Bacterial Cleanliness.

Designation		No. taken	Unsatisfactory
Tuberculin Tested	 	70	6
Tuberculin Tested (Pasteurised)	 	18	_
Pasteurised	 	115	3

The cleanliness of milk sold in the Borough was very good.

All this Tuberculin Tested milk was produced outside the Borough.

Two samples of cream were analysed, the fat content was satisfactory but the cleanliness was sub-standard.

Examination for Tubercle Bacilli. 11 samples were examined for the presence of tubercle bacilli and all proved to be negative.

Examination to detect Adulteration or Abstraction. 64 samples were analysed, details of which are given in the Foods and Drugs section on page 40.

Graded Milk. The following licences were granted under the appropriate Regulations:—

To retail Tuberculin Tested or	r Tube	Tuberculin		
Tested Pasteurised Milk			20	
To Pasteurise			6	
To retail Pasteurised Milk			20	
To retail Sterilized Milk			12	
Supplementary, Sterilized Milk			1	

Milk Consumption. The average amount of milk consumed by the resident population was approximately 7,280 gallons daily, or 0.8 pint per head per day. The amount of Tuberculin Tested milk consumed daily was approximately 255 gallons.

99% of the milk (excluding T.T.) consumed in the Borough had been subjected to pasteurisation.

Milk in Schools. The number of \(\frac{1}{3}\)-pints supplied to schools on each school day was approximately 7,500.

### ICE CREAM.

Many manufacturers have ceased to make ice cream in this Borough and the number who manufacture regularly has become reduced to three.

189 premises are registered for the storage and sale of ice cream.

39 samples were taken and analysed for bacterial cleanliness with the following results:—

Grade I		 	61.5%
Grade II		 	18.0%
*Grade III		 	7.5%
*Grade IV		 	13.0%
* Unsat	isfactory.		

The general standard of cleanliness of ice cream continues to improve.

The requirements of the Heat Treatment Regulations are rigidly

4 samples were analysed as regards fat content and were found to be of good quality.

enforced.

# FOOD AND DRUGS ACT, 1938—SECTION 3. DEFENCE (SALE OF FOOD) REGULATIONS, 1943.

104 samples of food were submitted for analysis by the Public Analyst:—

 - D!!			No.	Not
Description			Analysed	
Milk		 	51	7 (a)
" Channel Island		 	12	
" Sterilized		 	1	
" Yoghourt		 	1	
Cream		 	2	
Baking Powder		 	3	
Sausages or Sausage	Meat	 	. 11	8 (b)
Fish Paste		 	2	
Malt Vinegar		 	1	
Coffee	·	 	3	
Pickles		 	1	
Chocolate Spread		 	2	
Ice Cream		 	5	
White Pepper		 	2	
Ground Ginger		 	1	
Ground Almonds		 	3	
Jam Tarts		 	1	
Salad Cream		 	2	

- (a) Five samples were deficient in fat in varying amounts from 6% to 20%, and two in solids not fat 2.3% and 2.4% respectively. Adulteration was not suspected.
- (b) Six were sub-standard as regards meat content, and the presence of a preservative was not disclosed in three instances.

# ANNUAL REPORT of the Meteorological Observations for 1951.

### METEOROLOGICAL OBSERVATIONS.

### FOR THE YEAR 1951.

The Meteorological Station is in Beach House Park, which is 25.00 feet above Ordnance Datum. Here all the instruments, except the Fortin Standard Barometer and the Sunshine Recorder, are kept.

The shade thermometers, in a Stevenson screen, are:—self-recording maximum, self-recording minimum, dry bulb and wet bulb.

All thermometers are Fahrenheit and are verified at the National Physical Laboratory, Kew.

A self-recording minimum thermometer is used for registering the temperature on the grass.

Four earth thermometers are in use at various depths-1ft., 2ft., 4ft. and 6ft.

There is an official five-inch copper Rain Gauge Meteorological Office pattern, also a Dines Tilting Siphon Automatic Rain Recorder.

The Campbell-Stokes Sunshine Recorder is fixed on a platform at the top of Christ Church Tower, 111 feet above mean sea level and 84 feet above ground level.

All instruments at the local Meteorological Observatory are examined and tested annually by Officers of the Meteorological Office, Air Ministry, London.

A code report is sent by telegram each evening to the Meteorological Office, London, and the leading Newspapers are supplied with reports from that Office.

Weekly reports are sent to the local newspapers, and a full report monthly to the Meteorological Office, London, for publication in their journals. Rainfall statistics are supplied to the British Rainfall Organization.

The daily weather report of the Air Ministry, the previous day's sunshine card and a collection of charts and records are also exhibited in the windows of the information bureau at the Pier.

This report contains statistics showing the means for the year of Barometric pressure, Air and Earth temperatures, Sunshine, Wind and Humidity, compared with the averages for a series of years.

The 35 years average period (1881-1915), used by the Meteorological Office, is known as the Normal.

Observations are taken every day throughout the year at 9 a.m. and 6 p.m.

### ABSTRACT OF OBSERVATIONS FOR THE YEAR, 1951.

Total amount of bright sunshine: 1838.4 hours.

Number of days with sunshine: 297.

Rainfall: 37.98 inches.

Number of rain-days (.01 inch or more): 184.

Number of wet days (0.04 inch, or more): 146.

Highest barometric reading: 30.608 inches on November 27th.

Lowest reading: 28.758 inches on February 5th.

Highest recorded temperature in screen: 76° on July 30th.

Lowest recorded temperature in screen: 22° on January 30th.

Mean temperature: 51.2°.

Mean relative humidity: at 9 a.m. 84.0%.

Lowest temperature on the grass: 18° on January 30th.

Wettest day: June 11th, 1.40 inches.

Sunniest day: June 19th, 15.1 hours.

Number of days snow or sleet fell: 7.

Number of days hail fell: 13.

Number of days thunder heard: 13.

Number of ground frosts: 44.

Number of days with wind at gale force: 5.

Number of days with fog (9 a.m.): 1.

### BRIGHT SUNSHINE.

The duration of bright sunshine for the year was 1,838.4 hours.

This amount is 41.1 per cent. of the time during which the sun was above the horizon, giving a daily mean of 5.03 hours. The average yearly sunshine for the previous ten years was 1,845.6 hours. During this period the year with the highest record was 1949, when 2,128.9 hours were recorded, whilst the year 1942 was the lowest with 1,711.6 hours. The sunniest day was June 19th when 15.1 hours were recorded.

June, with 294.0 hours, was the sunniest month, and December with 64.8 hours, was the least sunny.

A sunless day is one on which less than 6 minutes of bright sunshine are recorded.

### RAINFALL.

The rainfall for the year 1951 was 37.98 inches. This amount is 10.55 inches above the Normal and 12.93 inches above the previous ten years average.

The month of October was the driest with 1.37 inches, falling below the Normal amount by 2.25 inches. February was the wettest month, with 5.49 inches, this amount being 3.52 inches above the Normal. The heaviest day's rainfall was 1.40 inches on June 11th. There was 184 days on which 0.01 inch or more rain fell, compared with 143 days which is the average number for the previous ten years.

One inch of rainfall is equivalent to 100.925 tons per acre or 14.4686 millions of gallons per square mile.

WINTER RAINFALL. Total for six months (January to March and October to December) was 20.98 inches, compared with an average winter rainfall for the previous 10 years of 14.32 inches.

SUMMER RAINFALL. Total for six months (April 1st to September 30th) was 17.00 inches, compared with an average summer rainfall for the previous ten years of 10.73 inches.

### HUMIDITY.

The mean barometric reading for the year was 29.907 inches (when of the air) at 9 a.m. was 84% compared with the previous five years' average of 82%.

### BAROMETER.

The mean barometric reading for the year was 29.907 inches (when reduced to sea level and to a temperature of 32° Fahr.) the average for the previous ten years being 29.963 inches. The highest reading for the year was 30.608 inches on November 27th, and the lowest reading was 28.758 inches on February 5th. The absolute range for the year was 1.850 inches and the average range for the previous ten years 1.597 inches.

One inch barometric pressure is equivalent to 70.727 lbs. per square foot.

### TEMPERATURE.

The mean temperature for the year was 51.2° Fahr., which is 0.5° above the Normal. Since 1881 the warmest year was 1949 with a mean temperature of 52.8° The highest shade temperature for 1951 was 76° recorded on July 30th and the lowest 22° on January 30th. The extreme range of temperature was 54° compared with the average range of 60.1° for the previous ten years. The temperature on the grass fell below 30.4° on 44 nights. The lowest temperature on the grass was 18° during the night of January 30th.

EARTH TEMPERATURES. The highest and lowest temperatures at various depths in the earth were as follows:—

Below Surface 1 ft.	Highest 66.1°	Date July 21st	Lowest 35.8°	Date January 30th
4 ft.	61.5°	Aug. 7th, 8th, 9th	41.8°	December 3rd

### WIND.

Percentages of direction of wind from 730 observations taken at 9 a.m. and 6 p.m. throughout the year:—

	9 a.m.	6 p.m.		9 a.m.	6 p.m.
N.	6.0	5.7	S.	10.4	6.6
N.E.	13.4	11.3	S.W.	26.6	28.6
E.	3.0	4,4	W.	12.6	18.6
S.E.	10.4	10.4	N.W.	12.9	13.2
Calm	4.7	1.2			

## TABLE 1-CLOUD AND HUMIDITY.

Month.		Amount 1–8	Mean Relative Humidity	Mean Humidity previous 5 years 1946–1950
	9 a.m.	6 p.m.	9 a.m.	9 a.m.
January	 5	5	% 91	% 89
February	 6	5	93	86
March	 5	5	85	81
April	 4	4	73	77
May	 4	5	78	78
June	 3	3	76	77
July	 4	4	80	76
August	 6	4	81	78
September	 5	6	85	82
October	 4	3	86	82
November	 5	5	88	87
December	 6	6	89	87
Year 1951	 5	5	84	Yearly average 82

# TABLE 2-BRIGHT SUNSHINE ((Mainland Stations).

(Extract from Table of Official Returns of the Meteorological Office, Air Ministry).

		Minist	ry).		
					Hours
Station					Year 1951
Falmouth					1886.0
Chichester (Bird	lham)				1871.5
WORTHING					1838.4
Eastbourne					1836.4
Weymouth					1830.6
Littlehampton					1819.2
Bognor Regis					1817.3
Portsmouth		2000			1816.2
Seaford					1811.0
Teignmouth					1808.3
Penzance			***		1805.5
Herstmonceux	****				1801.4
Torquay		**			1794.9
Swanage	***	1			1785.9
Paignton					1779.5
Hastings					1775.9
					1775.5
Gulval					
Polegate					1774.8
Brighton					1773.6
Calshot					1765.8
Burlingham					1760.8
Bexhill					1750.7
Exmouth					1749.3
Lowestoft					1746.5
Chivenor					1743.4
Clacton-on-Sea					1741.4
Margate					1735.7
Folkestone					1734.2
Bournemouth					1730.6
Dawlish					1728.3
Herne Bay					1727.7
Lympne					1720.5
Hartland Point					1719.3
Felixstowe					1715.5
Plymouth (Mt. I	Batten)				1715.3
Poole					1715.1
St. Eval					1712.5
Southend					1711.1
Dover					1708.2
Whitstable					1703.9
Newquay					1701.7
West Raynham					1700.5
Maldon					1699.4
				0.00	
Ellbridge					1698.5
Tangmere				100.00	1696.6
Rye			1		1692.5
Plymouth Hoe					1691.9
Southampton					1687.8
Dovercourt					1685.5
Throwley					1678.2

# TABLE 3-BRIGHT SUNSHINE.

30 years averages of bright sunshine for Great Britain extracted from Air Ministry official publications.

1901-1930

	1901-1930	,			
Town			Hot	urs of Sunshine	
WORTHING	 			1834	
Bognor Regis	 			1827	
EASTBOURNE	 			1826	
Sandown	 			1814	
HASTINGS	 			1801	

1801

1800

### 1906-1935

Southsea

Littlehampton

Town			Hours	s of Sunshine
WORTHING		 		1834
EASTBOURNE		 		1833
BOGNOR REG	IS	 		1822
SANDOWN		 		1814
HASTINGS		 		1797
VENTNOR		 		1792
Littlehampton		 		1791

Note: - Capitals indicate averages for a complete period of 30 years.

TABLE 4.—BRIGHT SUNSHINE.

,	_	_		_													
	Lowest	Year	1	1912	1947	1916	1905	1932	1909	1944	1912	1945	1915	1934	1903	Dec. 1903	1913
tals	Lov	Hours		34.5	29.8	95.3	105.3	148.9	143.5	133.8	112.6	97.1	81.9	44.4	31.1	31.1	1600.2
Monthly Totals	Highest	Year	0,00	1940	1949	1907	1912	1909	1925	11611	1899	8681	1919	1909	1946	July 1911	1899
	Hig	Hours	0000	109.9	140.3	220.8	267.2	353.1	318.8	369.0	298.4	262.6	9.181	131.3	0.96	369.0	2141.0
Moes in	one day	uoms.		0.0	9.8	6.6	13.3	14.7	15.1	15.1	14.5	6.7	7.6	8.3	8.9	15.1	tals
Dave	with	on the same	01	10	21	23	28	53	59	29	29	27	26	61	19	297	Year To
Percentage	of average	0	100	103	88	80	1118	88	125	103	92	72	124	66	111	100	Highest and Lowest Year Totals
Hours			0,0	C7	2.8	3.7	7.1	9.9	8.6	7.7	6.4	4.3	4.9	2.6	2.1	5.03	nest an
Average for 30	years 1906-1935		77	99	68	144	181	231	236	233	216	180	123	80	55	1834	Higl
Total	Bright		73.3	0.41	76.8	115.3	213.7	203.4	294.0	239.2	1.861	129.2	152.7	78.9	8.4.8	1838.4	
	Month		Tomisone	Samuel )	February	March	April	May	June	July	August	September	October	November	December	Year 1951	

TABLE 5—BRIGHT SUNSHINE.

Year	Campbell-Stokes Recorder	Bright Sunshine	Sunniest	Days
rear	Bright Sunshine Hours	Days	Day	Hours
1931	1610.5	309	June 27th	15.0
1932	1616.7	313	June 15th	15.0
1933	2102.6	323	July 4th	15.2
1934	1811.0	289	July 10th	15.5
1935	1805.2	309	July 8th	15.0
1936	1675.0	310	June 23rd	15.2
1937	1668.3	317	June 6th	14.4
1938	1796.4	310	June 21st	15.3
1939	1809.7	310	June 1st	15.4
1940	1976.8	323	July 1st	15.2
1941	1791.7	317	June 25th	15.2
1942	1711.6	312	June 5th	14.8
1943	1864.8	313	June 24th	14.9
1944	1765.5	315	June 24th	14.9
1945	1783.9	309	June 17th	14.8
1946	1790.7	307	July 10th	15.1
1947	1896.8	294	June 10th	14.9
1948	1916.9	319	May 18th	14.9
1949	2128.9	317	July 10th	14.8
1950	1805.4	312	June 16th	15.1
1951	1838.4	297	June 19th	15.1
Average for 20 years 1931—1950	1908.3	311		

TABLE 6—RAINFALL.

1951		Total Rain- fall	Difference from the Normal	Greatest Fall in 24 hours beginning 9 a.m.	.01 in.	r of Days ith .04 in. or more	Total Rain Days
January		ins. 3.37	ins. +1.05	ins. 0.73	19	15	19
February		5.49	+3.52	0.75	23	20	23
March		3.44	+1.48	0.69	21	16	21
April		2.39	+0.82	0.58	17	13	17
May		2.36	+0.71	0.97	12	10	12
June		1.88	+0.15	1.40	8	4	8
July		2.77	+0.73	1.21	6	3	6
August		4.14	+1.90	1.32	18	15	18
September	1.	3.46	+1.34	1.09	14	10	14
October		1.37	-2.25	0.55	9	6	9
November		4.57	+1.39	0.72	22	21	22
December		2.74	-0.29	0.65	15	13	15
Year		37.98	+10.55	1.40	184	146	184

TABLE 7—RAINFALL.

	Delegan is	No. of Days	Greatest	Fall in a Day
Year	Rainfall in inches	Rain fell (0.01 inch or more)	Amount in inches	Day and Month
1931	25.80	147	1.25	10th November
1932	23.91	148	1.22	20th October
1933	20.40	125	1.44	12th September
1934	27.49	139	1.62	8th November
1935	37.74	173	1.39	7th November
1936	27.42	169	1.79	6th November
1937	31.59	162	0.87	4th February
1938	22.95	156	0.75	24th September
1939	34.42	171	1.41	13th October
1940 -	30.13	148	1.50	3rd November
1941	25.83	139	1.36	4th June
1942	24.62	129	1.06	25th October
1943	23.68	145	1.74	13th January
1944	22.14	136	1.22	20th October
1945	22.98	138	2.05	10th July
1946	30.96	170	2.02	-16th August
1947	24.31	139	0.94	10th March
1948	25.23	154	1.41	6th August
1949	23.90	120	1.34	20th October
1950	26.95	157	O.89	20th November
Average for 20 years	26.62	148	2.05	10th July 1945
1951	37.98	184	1.40	11th June

TABLE 8-BAROMETRIC PRESSURE AND TEMPERATURE.

1951	(Redu	metric Pre iced to Sea d 32° Fah	Level	1	Air To	emperat	ure in Scr	een	
	Mean	Extre	mes.	Means	s of	Mean	Difference	Extr	emes
	Inches.	Highest	Lowest	A Max.	B Min.	of	from Normal	Max.	Min
				0	0	0	0	0	0
January	29.782	30.470	28.988	45	37	41	+0.7	50	22
February	29.618	30.345	28.758	46	37	42	+1.3	50	31
March	29.769	30.382	29.099	47	37	42	-1.1	52	30
April	29.960	30.337	29.122	53	40	47	_	73	33
May	29.930	30.227	29.520	58	48	53	-0.9	65	39
June	30.025	30.379	29.785	64	52	58	-0.2	73	46
July	30.114	30.366	29.761	69	57	63	+1.2	76	48
August	29.870	30.227	29.529	67	57	62	-0.3	73	48
September	30.008	30.354	29.589	65	55	60	+1.0	76	46
October	30.110	30.441	29.754	58	47	52	-0.2	65	33
November	29.677	30.608	29.905	56	46	51	+4.1	60	32
December	30.022	30,461	29,273	49	40	45	+2.5	53	27
Year 1951	29.907	30,608	28.758	56	46	51	+0.5	76	22

TABLE 9—WINDS.

			9 :	a.m. O	BSERVA	TIONS.—	-DIREC	TION.	
Month.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm
January	 2	2	_	_	3	14	3	7	_
February	 1	3	1	3	4	8	6	2	-
March	 3	5	_	6	2	6	3	6	-
April	 1	6	1	3	1	7	7	4	_
May	 6	9	_	4	5	5	-	2	-
June	 2	4	2	5	2	8	5	2	_
July	 1	2	1	2	6	11	3	5	_
August	 _	1	_	2	2	17	4	5	_
September	 2	5	_	3	4	4	5	2	5
October	 3	11	4	4	2	3	-	2	2
November	 1	-	2	3	5	6	2	5	6
December	 -	1	_	3	2	8	8	5	4
Year 1951	 22	49	11	38	38	97	46	47	17

Month.			6	p.m.	OBSERV	ATIONS	.—Dire	CTION.		
Month.	Month.		N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm
January		1	3	1	1	2	10	5	8	_
February		1	5	-	1	3	12	4	2	_
March		1	5	_	7	1	_ 10	3	4	_
April		1	4	1	5	1	4	9	5	_
May		4	10	1	6	1	6	1	2	_
June		_	3	2	5	3	7	8	2	-
July		1	2	1	1	_	13	10	3	-
August		1	_	_	1	3	15	7	4	_
September		_	5	3	2	2	7	5	4	2
October		6	4	5	4	2	2	-	5	3
November		3	-	2	2	4	8	6	5	-
December		2	-	-	3	2	10	10	4	-
Year 1951		21	41	16	38	24	104	68	48	5

TABLE 10-VISIBILITY.

Summary of observations taken at 9 a.m. and 6 p.m.

D&E         F         G         H         - 1         J         K         L           9         6         9         9         9         9         9         9         9         9         9         9         9         9 <th></th> <th></th> <th></th> <th>FOG</th> <th>(5)</th> <th></th> <th></th> <th>2</th> <th>AIST</th> <th>OR</th> <th>MIST OR HAZE</th> <th>ш</th> <th>T</th> <th></th> <th>1</th> <th>000</th> <th>GOOD VISIBILITY</th> <th>ISIB</th> <th>H</th> <th>4</th> <th>1</th> <th></th>				FOG	(5)			2	AIST	OR	MIST OR HAZE	ш	T		1	000	GOOD VISIBILITY	ISIB	H	4	1	
9         6         9         9	A B		H	B&	C		Э	IT.		0	-	Η		-		7		×		7		M
-       1       1       1       2       1       8       10       8       6       5       6       3       6       2       -       1         -       -       2       -       5       4       3       6       3       3       3       3       3       2       2       2       2         -       -       1       -       2       3       5       4       4       11       10       4       3       4       1       3       5       2       2       2       2       2       2       2       2       2       3       4       11       10       4       3       4       1       3       3       4       6       5       3       3       4         -       -       -       1       1       -       -       1       -       -       1       5       8       6       10       8       4       6       5       3       3       4       6         -       -       -       -       -       -       -       -       -       -       2       2       7       6       8	9 6 9 6 a.m. p.m. a.m. p.m.	6 9 p.m. a.	0, 6	9 m.p		9 I.m. F	6 J.m. a	9 1.m. p		9 L.m.	6 p.m.	9 a.m. p		9 .m. p	6 .m. a	9 .m. p.	6 9 m. a.	m. p.	6 m. a.	9 m.p.		р.
-       -       2       -       5       4       3       6       3       3       8       9       3       3       2       3       4       1       3       4       1       3       4       4       1       4       9       7       6       8       4       6       5       3       4         -       -       -       -       1       -       -       7       5       9       9       7       2       3       4       6       9       3       4       6       9       9       7       2       3       4       6       9       9       7       2       3       4       6       9	1	1	1	-	1	E	-	-	-	2	-	00	10	00	9							-
-       -       1       -       2       3       5       4       4       11       10       4       3       4       1       3       5       5       9       7       6       8       4       6       5       3       3       4         -       -       -       1       -       1       -       7       5       9       9       7       2       3       3       4       6       5       3       4       6       5       3       4       6       5       3       4       6       5       3       3       4       6       9       9       7       2       3       3       4       6       8       4       6       5       3       4       6       8       4       6       8       4       6       8       4       8       6       9       9       7       2       3       4       8       6       9       9       7       2       3       4       8       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9       9 <th>1</th> <td>1</td> <td>-</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>2</td> <td>1</td> <td>S</td> <td>4</td> <td>6</td> <td>9</td> <td>33</td> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>	1	1	-	1	1	1	1	2	1	S	4	6	9	33	6							-
-       -       -       1       1       -       4       9       7       6       8       4       6       5       3       3       4         -       -       -       -       1       -       -       7       5       9       9       7       2       3       3       4         -       -       1       -       -       1       -       1       5       8       6       10       8       3       4       6         -       -       1       1       -       1       -       1       4       6       8       6       10       8       4       8       8       4       8       8       4       8       8       4       8       8       4       8       8       4       8       8       4       10       9	1	1	- 1	1	1	1	1	_	1	2	3	2	4			-			4	_		
-       -	1	1	1		1	1	1	1	-	-	1	-	1	4	6					-		
-       -       1       -       -       1       -       1       5       8       6       10       8       3       4       6         -       -       -       -       1       -       1       5       8       6       10       8       4       6         -       -       -       1       -       -       -       -       2       2       7       6       8       4       8       4       8       8       4       8       8       4       10         -	1	1	1		1	1	1	1	1	-	-	1	1	7	2		-	1		200		_
-       -	1	1	1		1	1	1	-	1	1	1	-	1	-	2				8	-		
-       -	1	1	1		1	1	1	1	-	-	7	-	1	-						-		~
-       -       1       1       -       -       1       2       6       4       12       8       4       9       3       2       3         -       -       1       3       2       2       4       4       10       11       5       5       1       2       2       2       2       2       2       2       2       2       2       2       2       2       2       3       4       4       4 <th>-</th> <td>1</td> <td>1</td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> <td>2</td> <td>7</td> <td></td> <td></td> <td></td> <td>4</td> <td></td> <td></td> <td></td>	-	1	1		1	1	1	1	1	1	1	1	1	2	7				4			
-     -     1     3     2     2     4     4     10     11     5     5     5     1     2     2     2       -     -     -     1     -     -     3     1     4     5     7     10     7     8     6     3     3       -     -     2     2     7     1     7     9     5     7     3     2     2     3     1     4     4       -     1     9     10     21     14     34     36     55     71     91     75     59     58     44     36     51	1	1	1	-	1	1	1	-	-	1	1	-	7	9								
-     -     -     1     -     -     3     1     4     5     7     10     7     8     6     3     3       -     -     2     2     7     1     7     9     5     7     3     2     2     3     1     4     4       -     1     9     10     21     14     34     36     55     71     91     75     59     58     44     36     51	1	1	1		1	1	1	-	3	7	7	4			==	70.00	-	S	_			
-     -     2     2     7     1     7     9     5     7     3     2     2     3     1     4     4       -     1     9     10     21     14     34     36     55     71     91     75     59     58     44     36     51	1	1	-	1	I	1	1	1	-	T	1	3	-	4	2							
-     1     9     10     21     14     34     36     55     71     91     75     59     58     44     36     51	1	1	1	1	1	1	1	2	2	7	-	7	6	5	7				3			
	1	1			1	-	-		10000	21	41	-									-	

KEY TO TABLE 10-VISIBILITY.

Bearing	S.E.	П	E.	S.	S.W.	W.	N.W.	N.W.	W.N.W.	Е	Ē.	W.S.W.	E.S.E.
View Point	Office Door	Office Gate	Office Gate	Office Window	Christ Church Tower	" " " "	3, 3, 3,		11 11 11		99 99 99		
Object	Chestnut tree on opposite side of road	Chestnut tree outside entrance to "Ryecroft"	N.W. corner of Town Hall	Christ Church Tower	Holy Trinity Church Spire	Heene Church Tower	Tarring Church Tower	Top of High Salvington Hill	Highdown Hill	Portslade Gas Works Chimney	Hills beyond Brighton	Selsey Bill	Beachy Head
Description of visibility	Dense Fog	Dense Fog	Thick Fog	Fog	Moderate Fog	Mist or Haze	Poor	Moderate	Good	Good	Very Good	Excellent	Abnormal
Actual Distance	21 yards	45 yards	110 yards	220 yards	430 yards	1100 yards	14 miles	23 miles	4‡ miles	6g miles	12½ miles	18‡ miles	27 miles
Standard Distance	22 yards	44 yards	110 yards	. 220 yards	440 yards	1100 yards	14 miles	2½ miles	44 miles	64 miles	12½ miles	18§ miles	25 miles
Letter	4	В	O	Q	Е	Ц	9	Н	I	3	×	Г	M

# TABLE 11-CLIMATE OF WORTHING-1881-1951.

1	1	ABLE		emperatu		or we	KILL	ING—18		Sunshine	
			Means	emperato	ires	Ext	emes	Raini	I	Sunsmine	
		1	1	1	1	-	1		Number		
Year	a.m.	, d	Max.	Range	Mean	Min.	IX.	Amount at Observ-	of days rain	Number of hours	Year
	9 a	Min.	N	Rar	M	Σ	Max.	atory	fell	in year	
					1	1		-			
1881	50.3	1 43.4	55.0	Degrees	49.2	13.5	82.0	Inches 29.60	142		11881
1882	51.6	45.1	56.5	11.4	50.8	26.6	81.0	32.35	180	_	1882
1883 1884	50.7 52.0	43.9	55.9 56.8	12.0	49.9	23.3 27.0	75.7 83.3	26.05 23.51	174 126	_	1883
1884	50.0	48.7	55.1	11.4	49.4	25.2	81.7	28.09	156		1885
1886	50.0 48.4	44.0	55.2	11.2	49.6 47.9	23.2	78.0 82.0	31.89	164 137	=	1886
1887	48.0	42.4	53.3	10.9	47.8	20.2	78.8	21.28 25.88	181	_	1888
1889	49.5	42.7	54.8	12.1	48.8	21.9	81.5	23.92	159	-	1889
1890	49.4 49.4	42.2	54.6	12.4	48.4	14.9 16.5	78.0 77.0	22.84 29.86	149 172	= )	1890
1892	49.1	41.8	54.5	12.7	48.2	20.2	76.0	23.73	141	-	1892
1893 1894	52.3 51.2	44.0	57.7 52.8	13.7	50.9	18.2 12.9	84.7	25.12 35.71	142 184	_	1893
1895	50.4	43.0	56.5	12.5	49.3	16.2	77.9	26.09	162	-	1895
1896 1897	51.0 51.4	43.3	56.5	13.2	49.9 50.8	22.9	80.7 80.7	25.74 26.07	152 172	_	1896
1898	52.2	45.7	57.6	11.9	51.6	27.0	80.9	22.51	158	-	1898
1899 1900	51.9 51.2	45.0	57.6 56.2	12.6	51.3	23.6 20.9	84.4 79.0	26.23 26.33	144 182	2141.0 1885.6	1899
1901	50.2	43.6	55.8	12.2	49.7	22.9	80.7	21.45	139	2017.0	1901
1902 1903	50.2 50.9	43.6 45.2	55.0	11.1	49.6 50.3	21.8 23.7	78.0 78.2	23.77 32.19	157	1661.7 1749.2	1902
1904	50.4	44.3	55.5	11.2	49.9	23.8	77.4	26.85	163	1748.4	1904
1905	50.1 50.6	42.2 44.3	55.6 56.1	11.4	49.1 50.2	23.9	77.1 78.6	24.63 30.44	162 173	1715.3 2010.6	1905
1906	50.2	45.1	54.8	9.5	50.0	20.4	76.1	21.78	158	1776.8	1907
1908	50.9 49.7	44.1	56.1 54.6	12.1	50.1 48.8	16.0 19.9	80.2 81.2	22.15	146 178	1991.3 1958.6	1908
1910	50.8	44.5	55.9	11.5	50.1	21.9	73.8	32.11 32.57	191	1731.0	1910
1911	52.8 51.6	45.1 45.0	58.0	12.9	51.5 50.8	25.4 19.0	87.9 84.2	31.68	149	2115.0 1609.9	1911
1912	52.1	45.9	56.6 57.4	11.6	51.6	26.2	79.0	35.95 34.98	192	1600.2	1913
1914	52.7	45.2 43.8	57.9	12.7	51.5	23.2 24.7	78.2	31.31	164	2000.5	1914
1915 1916	51.1 51.2	44.7	56.3 56.3	11.8	50.5 50.5	25.0	77.1 77.0	36.64 32.89	152 182	1801.3 1658.0	1916
1917	49.2	43.0	54.6	11.6	48.8	20.7	79.0	25.49	147	1804.7	1917
1918 1919	51.0 49.4	44.7	56.5 54.9	11.8 12.0	50.6 48.9	20.0 22.0	78.0 78.5	24.41 28.54	165 158	1856.5 1788.5	1918
1920	51.7	45.6	56.6	11.0	51.1	23.0	76.0	26.40	139	1692.1	1920
1921 1922	53.4 50.1	46.4	58.8 54.8	12.4 10.9	52.6 49.3	27.6 25.2	86.7 78.2	13.26 25.71	108	2101.5- 1781.2	1921
1923	50.8	44.5	55.6	11.1	50.1	24.0	86.0	30.62	170	1805.9	1923
1924 1925	50.8 49.8	45.4 44.7	55.3 55.9	9.9	50.3 50.3	25.0 24.0	74.6 80.2	32.65 34.70	159 158	1759.6 1955.8	1924
1926	51.6	45.7	56.7	11.0	51.2	21.8	83.3	28.57	160	1677.7	1926
1927 1928	50.8 51.9	45.0 45.1	55.8 57.0	10.8	50.4 51.0	22.4 21.6	78.1 82.0	34.88 32.84	165	1731.4 1999.1	1927
1929	50.9	44.1	56.0	11.9	50.0	13.0	80.0	29.71	134	2062.5	1929
1930 1931	52.0 51.0	46.9 45.0	56.4 55.0	9.5	51.3	26.0 21.0	82.6 77.0	28.31 25.80	169 147		1930
1932	50.5	45.1	55.8	10.7	50.5	23.0	80.0	23.91	148	1616.7	1932
1933 1934	52.0 52.1	45.5 45.6	56.4 57.5	10.9 11.9	51.2 51.8	23.6 24.0	81.2 82.0	20.40 27.49	125 139		1933
1935	51.8	46.1	56.6	10.5	51.3	25.6	83.8	37.74	173	1805.2	1935
1936 1937	51.3 51.5	45.4 46.3	55.9 57.2	10.5	50.7	27.1 26.0	81.3 76.8	27.42 31.59	169 162	1675.0 1668.3	1936
1938	52.7	46.1	57.1	11.0	51.6	19.5	82.5	22.95	156	1796.4	1938
1939 1940	51.8 50.0	45.8 45.0	56.5 56.0	10.7 11.0	51.2	20.0	81.5	34.42 30.13	171 148		1939
1941	50.3	44.0	56.0	12.0	50.0	22.0	83.0	25.83	139	1791.7	1941
1942 1943	50.0 52.0	44.8 46.0	55.3 58.0	10.5 12.0	50.5 52.0	19.0 28.0	83.0 80.0	24.62	129	1711.6 1864.8	1942
1944	51.3	45.4	56.2	10.8	50.8	26.0	81.0	23.68 22.14	145 136	1765.5	1944
1945	52.5 51.6	46.5	57.2	10.7	51.2	19.0	80.0	22.98	138	1783.9	1945
1946 1947	51.6	45.5 45.7	55.7 56.1	10.2 10.4	50.6 50.9	23.0 15.0	76.0 90.0	30.96 24.31	170 139	1790.7 1896.8	1946
1948	52.6	46.6	57.6	11.0	52.1	17.0	88.0	25.23	154	1916.9	1948
1949 1950	53.3 52.1	47.2 46.1	58.4 56.7	11.2 10.6	52.8 51.4	29.0 24.0	81.0 81.0	23.90 26.95	120	2128.9 1805.4	1949
1951		46.0	56.3	10.3	51.2	22.0	76.0	37.98	184	1838.4	1951



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